

1 Abstract of the Disclosure

2 The invention provides a system and method for managing clusters of par-
3 allel processors for use by groups and individuals requiring supercomputer level compu-
4 tational power. A Beowulf cluster provides supercomputer level processing power. Un-
5 like a traditional Beowulf cluster; however, cluster size is not singular or static. As jobs
6 are received from users/customers, a Resource Management System (RMS) dynamically
7 configures and reconfigures the available nodes in the system into clusters of the appro-
8 priate sizes to process the jobs. Depending on the overall size of the system, many users
9 may have simultaneous access to supercomputer level computational processing. Users
10 are preferably billed based on the time for completion with faster times demanding higher
11 fees.